



Procedures Manual

Environmental Impact Review of Major State Facilities



**Virginia Department of Environmental Quality
Office of Environmental Impact Review
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Environmental Impact Review of Major State Facilities

This manual was prepared and distributed according to the requirements of *VA Code §10.1-1191*, which directs the Virginia Department of Environmental Quality (DEQ) to develop procedures governing the preparation and evaluation of required environmental impact reports for state projects. *VA Code §10.1-1188* requires state agencies to prepare and submit an environmental impact report (EIR) for each major state project. This manual describes objectives, criteria, and procedures developed by DEQ to assure the orderly preparation and evaluation of environmental impact reports.

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Chapter 1. Overview

The purpose of environmental review is to identify and evaluate the environmental effects of proposed state facilities, to guide facility siting and design decisions in order to protect important environmental resources and to identify any environmental liability during the planning stages of a project. The analysis needed to prepare an environmental impact report helps agencies to assess the effects of development proposals and to consider alternative actions and mitigating measures to avoid or reduce adverse impacts. Review of the EIR provides DEQ and other state agencies with information that can be used to recommend project modifications, if needed, and to make recommendations to the Secretary of Administration. Preparation of EIRs assists proponent agencies in developing projects which are consistent with existing land-use policies including local plans and ordinances.

VA Code §10.1-1190 provides that the State Comptroller shall not authorize payments of funds for major state projects unless the request is accompanied by written approval of the governor after his or her consideration of the comments by DEQ on the environmental impact of the facility. Each new governor typically delegates the authority to approve projects to the Secretary of Administration by Executive Order. The Secretary of Administration must then weigh the benefits and environmental costs of the project before releasing funds for that project. DEQ's recommendations to the Secretary of Administration are advisory; however, the secretary may incorporate them as conditions of project approval.

In some instances, environmental review will help to avoid unforeseen construction costs to overcome environmental hazards. In other cases, environmental review will help agencies avoid adverse impacts on the natural resources of the Commonwealth. In all cases, environmental review helps agencies develop and operate facilities that are consistent with state environmental policies, such as the Commonwealth's pollution prevention policy.

In addition to the coordination of EIRs, DEQ's Office of Environmental Impact Review (OEIR) also coordinates the review of the following projects or actions:

- Airport runway construction and extension (VA Code §5.1-7)
- Consistency of federal actions with Virginia's Coastal Zone Management Program (pursuant to 15 CFR 930.1 *et seq.* [Coastal Zone Management Act]; implemented by Executive Order Number 13 [1986] and subsequently renewed every 4 years, the most current is EO 35 [2014])
- Electric generating plants and associated facilities (VA Code §56-46.1; State Corporation Commission-DEQ 2002 MOU)
- Farm and forest lands preservation during project planning for major state projects (VA Code §3.2-204 through §3.2-205)
- Federal environmental assessments and environmental impact statements developed under the National Environmental Policy Act (40 CFR 1500-1508)

- Hydropower projects (state agencies' responses to notices of proceedings by the State Water Control Board to consider certifications under 33 U.S.C. 1341) (*VA Code §10.1-1186(7)*)
- Mineral activities on state-owned lands (*VA Code §2.2-1157*; implemented by the "Minerals Management Plan", Commonwealth of Virginia)
- Oil and gas drilling proposals in Tidewater Virginia (*VA Code §62.1-195.1*)
- Intergovernmental review of federal programs (Federal EO 12372)

Chapter 2. Responsibilities of the Proponent Agency

The environmental impact reporting and review procedure should be a part of the planning, siting and design procedure for major state projects. When it is scheduled as part of the process, the preparation of the EIR can be accomplished efficiently and in a time frame that does not impede implementation of projects. Agencies that are considering major project initiatives are encouraged to contact OEIR early in order to enlist DEQ's assistance in identifying important issues and determining the level of analysis necessary.

In order to ensure consistent quality in conducting its reviews, DEQ needs certain information, which is discussed in the following sections. When insufficient information is provided for assessment of the impacts of the proposed project on the environment and natural resources, DEQ will return the EIR document to the proponent agency. If additional information is not provided, DEQ may limit its comments to those issues that have been presented adequately, while identifying deficiencies in the environmental report. Either action may result in delays in initiating a project. DEQ, therefore, urges each proponent of a project to review the EIR and this manual carefully to ensure that adequate information is provided.

DEQ also encourages proponent agencies to contact local planning and transportation agencies early in the planning phase for major state projects to ensure that local plans and ordinances are adequately considered. Agencies with special needs are encouraged to contact DEQ early in their project planning to discuss problems in meeting their mandates or questions about their responsibilities.

EIR Submission:

DEQ requests that EIRs be submitted electronically (one searchable PDF or Word document <50 MB via):

- VITA LFT
- Email (10 MB max)
- Website of FTP site

Paper copies or CDs may be required and should be provide upon request.

Chapter 3. Responsibilities of Reviewing Agencies

DEQ must review and comment on an EIR within 60 days. In conducting its reviews, OEIR relies heavily on the project-specific comments and guidance of other divisions within DEQ as well as other agencies. In reviewing EIRs, state agencies should determine whether any of their proprietary, management, policy development or regulatory responsibilities is likely to affect or be affected by the project under review. The effect should be described in the agency's comments.

OEIR relies on other DEQ divisions and agencies to provide the basic information for comments and recommendations about a proposed facility. The reviewing agency or entity is expected to bring its expertise to bear on the analysis presented in the EIR. If permitting will be required, agencies should identify the criteria or anticipated permit conditions. Reviewing agencies should also recommend application of existing agency or state policies.

Reviewing agencies should provide a rationale for their comments, which may include statutory requirements, regulatory requirements, memoranda of agreement or understanding, relevant state policy or other reasoning which underlies their suggestions. Development of state facilities must incorporate protection measures stipulated in state policies, even those that are more stringent than applicable regulatory requirements. For example, all agencies of the Commonwealth must administer their programs in accordance with the following:

- The goals and priorities of Virginia's Coastal Zone Management Program established in 1986 and Executive Order No. 35 (2014)
- Permit requirements for impacts to wetlands outlined in the Commonwealth's wetlands law (*VA Code* §62.1-44.15:21)
- The Commonwealth's pollution prevention policy (*VA Code* §10.1-1425.11).

Chapter 4. DEQ Guidelines for the Contents of an EIR Document

In order to clearly discuss the content required by law to be included in the EIR, DEQ recommends that the EIR document follow the outline below. However, the proponent agency may, at its discretion, depart from this format provided the substance of each element enumerated in VA Code §10.1-1188 is included in the EIR.

An EIR should be based on preliminary design drawings, if possible, or on the conceptual drawings of the planning study. Preparation of the report and DEQ's review should occur before the final site design is completed. DEQ's review will focus on whether the report accurately describes unavoidable environmental impacts and on the proponent agency's commitment to avoid or reduce those impacts.

EIR Contents:

- Project description
- Affected environment
- Impacts of the project
- Alternatives
- Mitigation
- Irreversible environmental changes

- **Project description:** A discussion of what is being proposed, important design features, how the facility will be operated and the purpose of the facility, including:
 - Title
 - Sponsor agency contact person and contact information
 - Capital budget appropriation data (agency code, project code, budget item and the budget biennium), if applicable and available at the time of submission
 - The location of the project, clearly identified on a US Geological Survey topographic map or its equivalent, and a site plan
 - A full project description, including aspects of the project that may cause direct or indirect environmental impacts. For example, the document must discuss provisions for utilities such as existing and proposed facilities for providing potable water and wastewater treatment, including intake or outfall locations, expected additional demands and facility capacities. Description of the site must be thorough and include information on existing or proposed storage tanks (number, capacities, spill prevention measures and containment plans) as well as provide some history on the previous use of the site and any known petroleum releases in the project vicinity. DEQ recommends a database search for waste sites in proximity to the project site (see Appendix P).
- **Affected environment:** A discussion of baseline information for the impact analysis and to identify features that require specific designs or that limit design alternatives. This section

should identify sensitive environmental features that may be affected by the project. An EIR Submission Checklist is included as Appendix D. Each item should be considered and discussed if applicable.

- **Impacts of the project:** A discussion of the environmental consequences of proceeding with the project is needed in order to properly weigh the costs of a project against its potential benefits and to evaluate needed mitigation measures. Potential impacts to significant resources should be considered and discussed for each of the project alternatives. Impacts should be discussed in measurable terms (acres, gallons per day, square feet, etc.) where possible. This section should describe and analyze the direct, indirect and cumulative environmental impacts of the preferred project alternative. An EIR Submission Checklist is included as Appendix D, and the EIR Concentrated Review Checklist is included as Appendix E. Each item should be considered and discussed if applicable.
- **Alternatives:** A discussion of alternatives to the project or why no alternatives were considered, including whether there are other ways to achieve the purpose that will be served by the project. The EIR should demonstrate consideration and analysis of the environmental impacts of the alternatives, as well as the program and fiscal impacts to the agency. Where adverse environmental impacts of the preferred alternative are likely to be severe, controversial or unacceptable, the alternatives analysis will be more important to the project review. Identification of alternatives should not be limited to site selection. There are four types of possible alternatives:
 - A discussion of alternative sites is essential if land is to be acquired, or if the preferred site is environmentally sensitive or controversial
 - Site plans can sometimes be revised to avoid impacts on resources on or near the parcel, which often helps to reduce environmental impacts to acceptable levels
 - Alternative methods of operation, including more efficient uses of the proposed facility
 - The no-action alternative means not pursuing the project and must be considered even if the proponent agency thinks it is undesirable.
- **Mitigation:** A discussion of measures that avoid or minimize the environmental impacts of the preferred alternative to identify, for reviewers, actions that can reduce or compensate for loss of environmental resources. Reviewers will consider whether the proposed mitigation is sufficient to avoid or make up for adverse impacts. Extra mitigation effort is warranted if the environmental impacts of the project are severe and unavoidable. Mitigation measures in the state project development process are not limited to those which may be required as permit conditions. In certain instances, the application of other state policies may warrant that state agencies go beyond permit requirements in carrying out their responsibilities. For example, the EIR should incorporate the Commonwealth's pollution prevention policy (see Appendix Q for more information on pollution prevention).

In preparing their EIR, proponent agencies are encouraged to include mitigation as part of the project design. Discussion of other actions that the agency has considered, even though they were rejected, should be included as evidence of the agency's effort to avoid significant environmental impacts. DEQ encourages proponent agencies to clearly present their mitigation commitments, including:

- Mitigation measures to which the proponent agency is willing to commit
- Measures that the proponent agency has considered but does not intend to pursue, which helps the reviewing agencies avoid duplicating analysis that has already been performed such as:
 - Discussing how the disposal of any petroleum or hazardous materials will be handled
 - Discussing how any building materials will be disposed
 - Innovative pollution prevention strategies and conservation methods promoting low- impact development should be incorporated in the design of new facilities. See Appendix Q for more information on pollution prevention.

The desirability of a mitigation measure is determined by its effectiveness in reducing or avoiding an adverse environmental impact or otherwise enhancing environmental values. From most desirable to least, mitigation includes:

- Avoiding an impact. This is most useful where the project will give rise to irretrievable loss of a resource in short supply (e.g., non-tidal wetlands) and where the alternatives analysis identifies feasible site-plan alternatives. It is the best form of mitigation.
- Reducing impacts in scale or type. If an adverse impact cannot be avoided, it should be minimized (for instance, paved areas may be reduced in size, or a conventional pavement replaced by porous pavement in order to minimize stormwater runoff).
- Compensating for lost resources or land area. Where there is no way to avoid or reduce the loss of an important resource, and compensation is achievable, then it should be included in the project proposal. Compensation includes replacement in a new location; preservation of other, similar resources (offsets); or preservation of other resources of similar value. If compensation is the chosen alternative, then safety factors should be considered (for example, creation of additional wetlands to offset the loss) in order to ensure effective function and value of the lost resource.

Mitigation supplements, but does not substitute for, innovative resource conservation measures on the part of state agencies. As a general rule, agencies are encouraged to include resource conservation as integral parts of their project plans. For instance, recycling of materials as a part of project operation is expected of all state agencies and does not qualify as mitigation.

- **Irreversible environmental changes.** A discussion of irreversible environmental changes, which is an opportunity to demonstrate understanding of the long-term impacts, if any, of the project's construction and use. This section should indicate whether the project will cause a permanent impact on air quality or water quality, whether it will consume significant land and water resources, or whether it will generate other demands on the natural resources of the immediate or surrounding area. Losses of significant resources, such as historic or archaeological sites, should be identified as well.

Examples of irreversible environmental changes that should be identified:

- Reduction or alteration of the flow of water in a stream or river
- Disturbance or destruction of archaeological sites
- Disturbance, destruction or alteration of a wetland or stream, in any way
- Permanent clearing or construction within a scenic area

Chapter 5. Guidelines for Preparing Two-Part EIRs

When land acquisition for construction is proposed and sufficient information concerning the development of the site is not immediately available, a two-part EIR is accepted in order to accommodate time constraints associated with the acquisition. Part 1 should precede the acquisition of land, and Part 2 may be deferred to a more appropriate phase of the project planning schedule. *Chapter 4, above, provides guidelines for the Part 2 of the two-part EIR.*

Part 1: Site Selection Evaluation

A Part 1 EIR should evaluate the selection or acquisition of a site. Part 1 allows agencies to evaluate the suitability of alternative sites for the proposed facility. Environmental liabilities and sensitive resources can be identified early, and the cost of mitigation strategies (to avoid or reduce impacts, or to avoid or clean up hazards) can be assessed in selecting the best site. DEQ's review focuses on whether agencies have selected and evaluated alternative sites, and on whether agencies have conducted accurate analyses of their preferred sites and incorporated those analyses into their purchase decision.

A Part 1 EIR must be submitted in sufficient time to allow review and comment before a purchase contract is signed. This document should demonstrate that the proposed site is suitable for the proposed use. The material submitted should provide a clear concept of the project that is proposed, environmental criteria that were used in the selection process, and characteristics of the property that constrain or enhance its use for the intended purpose. A Part 1 EIR should include:

- Project justification (from the Planning or Capital Budget Proposal)
- Alternatives to construction of facility (If an analysis of alternatives was prepared for the Capital Project Request, it should be included in Part I of the EIR.)
- Description of the proposed facility in as much detail as known at this stage, including:
 - Description of the facility design concept (Describe needed site clearing/leveling, the anticipated size and height of buildings, location of roads, location of parking lots, outdoor lighting, proposed landscaping, type of construction and materials, planned starting date and duration of construction, etc.)
 - Planned use and scope of action (Describe the nature of activities that will be conducted on the property and the anticipated volume of activity and resource impacts - for instance, water consumption, traffic generation, wastewater discharge, air emissions, etc.)
 - Typical or proposed site layout (include a sketch plan of how the facility would be laid out on the proposed site).
- Site selection criteria (should be developed and presented according to requirements for the Planning Study for Capital Requests that is prepared by the Department of Planning and Budget)

- Alternative sites considered. DEQ recommends that at least three sites within the facility's service area be evaluated and compared, and reasons demonstrated for selecting the preferred site.
- A map and description of the physical characteristics of the preferred site, including:
 - Current use, structures, infrastructure, and improvements on proposed and surrounding parcels (include site survey)
 - Topography of the site and surrounding area (include topographic map)
 - Physical features of site, including vegetation, rock outcrops, streams, rivers, wetlands, and other surface water; soil types; and other resources of concern listed in Appendix D.
 - All constraints to site design including local building restriction lines, highway setback lines, easements, covenants, reservations, and right-of-ways of record
 - Parcel size and shape (include site survey plat).
- A competent environmental hazards inspection of the proposed site, if completed, along with a report on the findings of that inspection. Agencies may wish to contact DEQ's [Division of Land Protection and Revitalization](#) for assistance in conducting or contracting for a hazards inspection.
- A map and description of sensitive features (including agricultural and forest lands, see Appendix K) of the proposed site that would be affected by the proposed project. The accurate depiction of resources that will be affected by proposed facility development is needed to determine the feasibility of alternative designs and mitigation measures as the project proceeds. Showing a general location is often sufficient when the resources are present on the property but are not within the likely area of project impact.
- Unavoidable adverse impacts if the concept facility is developed on the preferred site. The EIR should discuss how the design concept, construction and planned use will alter existing site characteristics and resources. Examples include:
 - Changes in flow and quality of stormwater runoff that will adversely affect existing streams, rivers, wetlands, or other surface waters
 - Existing structures to be altered or demolished. If demolition is contemplated, a separate demolition review is required by DGS' Division of Engineering and Buildings, including screening for asbestos-containing materials and lead-based paint. If it is contemplated in order to make room for the project under review, the demolition review information should be part of the EIR.
 - Conflicts between the proposed action and local plans or zoning ordinances that apply to the area
 - Proposed mitigation for unavoidable impacts (mitigation proposals are conceptual at this point, and will be implemented in site design and verified during the Part 2 EIR review).

Part 2: Information for Design and Construction

Where a Part 1 EIR has already been prepared to accommodate land purchase, a Part 2 EIR review ensures that the facility design conforms to environmental constraints already identified on the selected site. A Part 2 EIR provides the proponent agency with the opportunity to demonstrate that it has evaluated and adopted reasonable design and mitigation alternatives consistent with the Commonwealth's environmental policies. Information needed for a Part 2 EIR includes:

1. A brief discussion of the Part 1 EIR conclusions, DEQ's project number for the Part 1 EIR, and a brief summary of any recommendations and how these are implemented in the proposed plan. If the project is part of a master plan for which an EIR has been prepared, the Part 2 EIR should include a discussion of the Part 1 EIR's conclusions, DEQ's project number for that EIR and a brief summary of any recommendation.
2. Discussion of any conditions imposed by the governor or General Assembly that affect or relate to environmental performance.
3. Any changes in the project or impacts following submittal of the Part 1 EIR.
4. Those items discussed in Chapter 4 and listed on the EIR Submission Checklist in Appendix D and/or the EIR Concentrated Review Checklist (see Appendix E).

Chapter 6: EIR Review Process

Step 1: Upon receipt of an EIR, DEQ conducts a preliminary review of the document to ensure that basic information has been provided. If information is inadequate, the document may be returned for additional information. If the EIR is complete, the **60-day review period** commences, and DEQ circulates the EIR to reviewing agencies. DEQ strives to conduct this completeness review within 7 days of receipt. Public review of EIRs is not mandated for major state projects; however, DEQ may consider any information that it receives about the environmental effects of a project under review.

EIR Review Process:

1. Preliminary review by DEQ
2. Agencies review and comment
3. DEQ coordinates comments received
4. DEQ submits letter to Secretary of Administration
5. Governor authorizes/disapproves project funding
6. Reviewing agencies monitor project (optional)

Review by affected localities is sought by DEQ pursuant to *VA Code §15.2-2202*, which requires that DEQ include localities in the EIR review process. Localities are able to evaluate the proposed project for environmental impact, consistency with the locality's comprehensive plan, local ordinances and applicable laws and to provide the locality with the opportunity to comment. Comments from localities are considered in the same manner as comments from state agencies. Also, DEQ includes the appropriate planning district commission in the review as a matter of operating policy.

In cases where the impacts of a project are likely to be insignificant and DEQ can effectively predict the types of responses it would get in a coordinated review, DEQ may do a "limited" coordination with selected agencies.

Step 2: Reviewing agencies use the EIR to assess the project and send comments to DEQ. Agencies may request a site visit or may inform DEQ of additional information requirements. DEQ staff, the proponent agency and the reviewing agency will agree on schedule revisions if additional time is required.

Step 3: DEQ receives the comments of reviewing agencies. Any conflicts between the comments of different agencies are settled with the concerned agencies. Using agency comments and its own analysis, DEQ prepares comments and recommendations about the proposed project.

Step 4: DEQ submits its comments on the project to the Secretary of Administration within the 60-day statutory review period. Copies are provided to proponent agencies, appropriate reviewing/commenting agencies, the Department of Accounts (DOA), Department of Planning and Budget, and DGS' Division of Engineering and Buildings. DEQ's comments are also available for public review at OEIR within the DEQ Division of Environmental Enhancement.

Step 5: The governor authorizes or disapproves release of funds for a project. The governor has delegated authority to the Secretary of Administration to approve or disapprove major state projects pursuant to *VA Code §10.1-1190*.

Step 6: DEQ or other agencies with permitting or oversight responsibilities may monitor project development to ensure that the design and mitigation commitments are carried out. Monitoring is conducted in cooperation with the proponent agency, or in response to an emergency. DOA monitors state agencies' compliance with the law governing major state projects requiring evidence of completion of EIR review. As indicated above, the DEQ provides this evidence by copy of its comments.

Appendix A: Definitions and Acronyms

Acquisition for Construction: a gift, a lease or a purchase of land or rights thereto for the purpose of building a new or expansion of a state facility

Construction: any act of site preparation, including clearing and grading, excavation or erection of a structure

Cumulative Impacts: impacts on the environment that result from the incremental effect of the proposed action added to other past, present or reasonably foreseeable future actions

DOA: Virginia Department of Accounts

DCR: Virginia Department of Conservation and Recreation

DEQ: Virginia Department of Environmental Quality

DGIF: Virginia Department of Game and Inland Fisheries

DGS: Virginia Department of General Services

DHR: Virginia Department of Historic Resources

Direct Impacts: impacts caused by the proposed action that occur at the same time and place

Director: the Director of the Virginia Department of Environmental Quality

Environment: the natural, scenic and historic attributes of Virginia

Environmental Assessment (EA): an assessment of environmental impacts according to National Environmental Policy Act (NEPA) requirements which contains information about proposed federal agency actions, programs, grants and permits that may affect the environment and the significance of the impacts. The EA can serve as the basis for determining the necessity of preparing an EIS.

Environmental Impact Report (EIR): the document mandated by VA Code §10.1-1188, which must be prepared by a state agency proposing to construct a major state facility or acquire land for construction.

Environmental Impact Statement (EIS): a federally required document under NEPA that fully addresses environmental impacts, alternatives, and mitigation measures which contains information about proposed federal agency actions, programs, grants and permits that may affect the environment, and the significance of the impacts.

Indirect Impacts: impacts caused or induced by the action but occur later in time or are removed in distance.

Major State Project: the acquisition of an interest in land for any state facility construction, or the construction of any facility or expansion of an existing facility which is undertaken by any state

agency, board, commission, authority or any branch of state government, including state-supported institutions of higher learning, which costs \$500,000 or more. The definition of major state project also applies to any lease of state land to private entities for construction that meets the criteria of this section.

NPDES: National Pollutant Discharge Elimination System permit program

OEIR: DEQ Office of Environmental Impact Review

PDC: Planning District Commission

Proponent Agency: the agency that will build, occupy or be the primary user of a facility once it is completed.

State Facility: the building and grounds that are built for or used for state agency, state agencies, board, commission, certain authorities or any branch of state government.

Virginia CZM Program: Virginia Coastal Zone Management Program

VDACS: Virginia Department of Agriculture and Consumer Services

VDH: Virginia Department of Health

Virginia Outdoors Plan (VOP): the comprehensive outdoor recreation and open space plan prepared by the Virginia Department of Conservation and Recreation.

VMRC: Virginia Marine Resources Commission

VPDES: Virginia Pollutant Discharge Elimination System permit program.

Appendix B: Frequently Asked Questions

Who is required to submit an EIR?

- All state agencies, boards, commissions, authorities, and any branch of state government are required to prepare and submit an EIR on each major state project.
- State-supported institutions of higher learning are subject to the EIR requirement.
- Counties, cities and towns are exempt from the EIR requirement excepting local highway and road projects.
- Housing development or redevelopment authorities and industrial development authorities are exempt from the EIR requirement.
- The Virginia Port Authority's projects are exempt unless it is a capital project that cost in excess of \$5 million.

Which projects require an EIR?

- The requirement applies to major state projects as defined by *VA Code §10.1-1188*, including the following activities if they cost \$500,000 or more:
 - The acquisition, including gifts, leases or purchases of land or rights for state facility construction
 - The construction or expansion of a facility by a state agency or on state-owned land
 - The construction or expansion of a facility for use as a state facility
 - Any lease of state land to private entities for construction that meets the criteria of this section.
- The cost of the project includes the entirety of the project even where only a portion of the project results in site preparation, including clearing and grading, or excavation or erection of a structure and includes all construction, demolition, land clearing, purchase, lease and gifts of land cumulatively.
- Expansion of a facility for the purposes of complying with the American with Disabilities Act or other building and safety codes does require an EIR if the entire project is considered a major state project.

Which state projects *do not* require an EIR?

- Environmental assessment for highway and road construction on Virginia Department of Transportation rights-of-way is conducted according to procedures defined in a memorandum of agreement by the Secretaries of Transportation and Natural Resources (see Appendix K). However, EIRs are required for parking lots, sidewalks, driveways and other pavement within a state property boundary if they otherwise meet the EIR criteria.

- EIRs are not required for repairs, interior renovations or "maintenance reserve" projects, including the following, provided replacements are along the same alignments as the structures being replaced:
- Repair or replacement of damaged or inoperable equipment such as elevators, furnaces, plumbing fixtures, air conditioning and ventilation equipment
- Repair or replacement of components of plant such as masonry, ceilings, floor, floor coverings, roofs, sidewalks, parking lots, exterior lighting, boilers and air conditioners
- Repair or replacement of existing utility systems, such as electrical, water and sewer, heating and cooling
- Correction of deficiency in property and plant that are required to conform with building and safety codes or those associated with hazard corrections, including asbestos hazards when incidental to repair/maintenance. *Please note that expansion of a facility for the purposes of complying with the American with Disabilities Act or other building and safety codes does require an EIR if the entire project is considered a major state project.*
- When a state agency acquires developed property, no EIR is required unless new construction involving land-disturbing activities is proposed including expansion of the existing structure, and replacement of the structure or construction of additional structures. However, proponent agencies may choose to conduct an environmental hazards inspection before acquiring any property since pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980, a purchaser can be liable for past contamination of a property.
- EIRs are not required for master plans, although construction of specific facilities shown on a master plan will require an EIR if they meet the definition of a major state project above. Although it is not required, DEQ strongly encourages state entities preparing master plans for multiple acquisition or development projects to prepare an EIR. Review of the master plan EIR will expedite the review process for individual projects under the master plan by resolving common issues early.
- Acquisition for the purpose of carrying out an agency's land management responsibilities, which does not involve building on the land, does not require an EIR. Examples include the acquisition of Natural Area Preserves, Wildlife Management Areas or State Forest lands.

What must be addressed in an EIR?

§10.1-1188 of the Code of Virginia requires the following items be included in an EIR:

- The environmental impact of the project including the impact on wildlife habitat, farm lands and forest lands

- Adverse effects that cannot be avoided if the project is undertaken
- Measures proposed to minimize the impact of the project
- Alternatives to the proposed construction
- Irreversible environmental changes which would be involved in the project

See Chapter 4. DEQ Guidelines for the Contents of an EIR Document for detailed information.

What are the benefits of preparing an EIR document?

- The EIR is intended to inform proponent agencies, oversight agencies and other decision-makers of the environmental consequences of development activities by state agencies and to ensure that construction of state facilities is carried out in an environmentally sound manner.
- Preparing the EIR for a proposed project enables proponent agencies to identify potential impacts on environmental resources and to revise project plans in order to avoid, reduce or compensate for those impacts.
- The EIR is a commitment by the proponent agency that it has carried out a reasonable review and analysis of the environmental impacts of its facility development proposal and that it will implement all design and mitigation actions specified in the document.

What is achieved through the review of an EIR document?

- DEQ reviews the EIR in order to provide comments to the governor on the environmental impact of each major state project.
- The review assures that environmental impacts requiring modification of a major state project are identified in a timely manner, before acquisition of a parcel of land or before construction begins.
- Reviewing agencies determine whether any of their proprietary, management, policy or regulatory responsibilities are likely to affect or be affected by the project under review.
- If permitting will be required, regulatory agencies may identify criteria or permit conditions to aid the proponent agency in preparing a permit application.
- Reviewing agencies may apply existing agency or state policies or make recommendations to deal with the issues raised by the project under review. The objective of such comments is to assure that state agency projects provide a model for environmentally sound development.

Can the requirement to prepare an EIR be waived?

DEQ has no authority under the EIR law to waive the requirement.

Can a federal EA or EIS fulfill the requirement for a state EIR?

- Where a project is subject to both state and federal requirements, DEQ will accept a suitable federal document as the state EIR; however, the document must meet the standards outlined in this manual.
- State agencies that must meet federal EA or EIS requirements for a project should consult with DEQ early in the planning process in order to avoid duplicating efforts to produce the state EIR.

What if a project changes?

If a proposed project changes subsequent to the EIR review and approval, DEQ must be notified. DEQ shall determine if the change affects the environmental consequences addressed in the EIR thereby requiring further review.

When should an EIR be submitted?

- EIRs must be submitted in a timely manner. The State Comptroller may not authorize release of funds from the state treasury for a project unless the request is accompanied by the written approval of the governor after consideration of the comments of DEQ on the environmental impacts of the project. State agencies must submit an EIR in sufficient time to permit any modification of a project that may be needed because of environmental impacts.
- EIRs may be submitted for review at any time during the calendar year. The EIR is one of several documents that are required by the Virginia Department of Planning and Budget (DPB) and the Virginia Department of General Services' Division of Engineering and Buildings (DEB) prior to project implementation. Early submission provides needed time to resolve questions about the EIR in order to meet the DEB requirement for the project. This time frame also implements VA Code §10.1-1191, which requires EIR submission early enough to allow for project modification necessitated by environmental impact.
- EIR preparation and review should be an integral part of project planning.* As a general rule, EIRs should be prepared within one year of the intended submittal date. This is not always possible and an updated EIR may be necessary depending on the type of project and length of time between preparation and submittal. For construction projects, EIRs should be prepared, submitted and reviewed during the planning or equivalent phase of project development.
- EIRs for projects that include land acquisition must be submitted before the proponent agency is committed to the acquisition. DEQ-OEIR recommends that an option to purchase a property be

obtained and the pre-acquisition phase of the EIR be submitted in time for review to be completed before the option expires.

- Where possible, a complete EIR for the proposed facility should be reviewed before the property is acquired.
- Where unforeseen and uncontrollable events require an expedited review, DEQ will attempt to expedite the review process. However, failure by an agency to submit an EIR in a timely manner will not be sufficient grounds to shorten the review period. Project proponents must understand that if other DEQ divisions or agencies need additional time for review for any reason, DEQ must accommodate their request.
- The governor may approve receipt of gifts to the Commonwealth and expenditures of money on emergency projects when the General Assembly is not in session. Emergency projects require completion of the EIR and the review process as a pre-requisite to project implementation. In these cases the EIR should be submitted as soon as possible, and DEQ will review it as quickly as possible. Early contact with DEQ is recommended to ensure that DEQ's project schedule can accommodate an expedited review.

** The requirement to prepare an EIR is separate from the requirement in VA Code §15.2-2202.C requiring state agencies to notify the chief administrative officer of every locality in which a capital project involving new construction costing at least \$500,000.*

How long does DEQ have to review an EIR?

- DEQ must review EIRs and make a statement to the governor within 60 days. DEQ will confirm receipt of completed EIRs or request additional information and will inform agencies about any expected review schedule. If specific concerns are found, they will be analyzed and resolved with appropriate agencies. Specific concerns may also lead to negotiation or follow-up if not readily resolved.
- DEQ and reviewing agencies may determine that certain projects have negligible environmental impacts and do not need detailed analysis and review, and the review may be completed in less than 60 days.
- DEQ sets deadlines for comments from reviewing agencies and entities by determining the dates by which comments for EIRs are due. In most cases, about 30 days is available for reviewing agencies to review an EIR and return their comments to DEQ.
- Planning district commissions (PDCs) and localities may request additional review time, if necessary. In such cases, the reviewers must inform DEQ that they are unable to complete the review in the time available. The reviewer should provide some sense of the concerns of the PDC or the local government on the project in question. Depending on the issues related to the

project, DEQ will modify its deadline (within the statutory 60-days), if possible, or frame its response so as to take account of the needs of the commenting entity.

How long is an EIR review valid?

As a general rule, EIRs should be prepared within one year of the intended submittal date. This is not always possible and an updated EIR may be necessary depending on the type of project and length of time between preparation and submittal.

Appendix C: EIR Determination Worksheet

Project Name:
Project Description:
1. Does the project include construction or expansion of a facility? ___ Yes ___ No
a. If yes, is the expected cost of the construction expected to equal \$500,000 or more? ___ Yes ___ No
2. Does the project include the acquisition (lease, donation or easement) of land for the purposes of construction? (Note: Lease cost = annual lease amount X number of years.) ___ Yes ___ No
a. If yes, is the expected cost of the land acquisition <u>and</u> construction expected to equal \$500,000 or more? ___ Yes ___ No

If you answered "yes" to questions 1(a) or 2(a), an EIR is required. You should carefully consider the information in this manual, and discuss the project with DEQ. If you require written concurrence from the DEQ about whether an EIR must be submitted, please submit this form, a summary of the proposed project including location maps, and any supporting documentation to bettina.sullivan@deq.virginia.gov.

Appendix D: EIR Submission Checklist

Each item on this list should be addressed in the EIR either through discussion or comment that the resource is not present and does not apply.

- ___ **Preliminary site plan** that shows:
 - ___ Slopes greater than 15%
 - ___ Existing storm drainage systems
 - ___ Natural and artificial watercourses
 - ___ Chesapeake Bay Resource Protection Areas and Resource Management Areas (where applicable)
 - ___ Limits of the 100-year floodplain
 - ___ Limits of any wetlands on the site
 - ___ Location and limits of major soil categories
 - ___ Location, dimension, size and height of the following elements of the project, in as much detail as available, including:
 - ___ Sidewalks, streets, alleys, easements and utilities
 - ___ Existing and proposed buildings and structures
 - ___ Off-street parking facilities
 - ___ On-site sewage treatment/disposal systems and sanitary sewer lines, on-site water supply systems or public water mains and hydrants
 - ___ Slopes, terraces, retaining walls
 - ___ Proposed storm drainage systems
 - ___ Finish grading (two-foot contour interval within 100 feet of all buildings and maximum five-foot contour interval on remainder of property)
 - ___ Outdoor lighting
 - ___ Shore stabilization structures
- ___ **Land area, topography, and natural and physical features** of the land
- ___ **Surface waters**, including wetlands and streams
- ___ **Existing structures** or facilities affected by the project
- ___ **Land uses on abutting or adjacent parcels** and on other parcels likely to be affected by the proposed facility, including applicable regional plans and local ordinances (including those developed pursuant to the Chesapeake Bay Preservation Act) and plans such as

locally-developed watershed management plans, comprehensive plan recommendation of the local jurisdiction for the property and surrounding areas (if available), and state and locally-adopted transportation plans.

Any **petroleum or hazardous material storage** on the property that will be impacted by the project. Discuss how the disposal of these materials will be handled.

Disposal of building materials.

Indirect impacts of soil erosion (for instance, downstream deposition and wetlands).

Impacts from activities related to the project, such as the use of pesticides or herbicides, the management of hazardous materials or handling of solid/hazardous waste generated at the site.

Results from a database searches (see Appendix P)

Analysis of unavoidable project impacts.

Endangered, threatened, or rare plants, animals, or insects (see the Virginia Fish and Wildlife Information System at <http://www.vafwis.org/fwis>).

Species of Greatest Conservation Need identified in the Virginia Wildlife Action Plan (see <http://bewildvirginia.org>).

Significant habitat for terrestrial wildlife and birds (for instance, habitat for rare species, important breeding sites or migratory stopovers).

Other unique or important terrestrial vegetation (for instance, foraging areas, stands of mature forest, or wilderness study areas).

Aquatic life: fisheries, vegetation, including submerged aquatic vegetation, benthic organisms, shellfish growing area (if present, indicate whether VDH has issued a shellfish condemnation notice for the subject waters).

Anadromous fish use areas, trout streams, and colonial waterbird nesting colonies.

Historic structures, listed or eligible for listing on the Virginia Landmarks Register or the National Register of Historic Places (see Appendix L).

Archaeological sites (see Appendix L).

Agricultural land, either prime or important (as defined by the Natural Resources Conservation Service, VDACS or the local ordinance), or farming operations and quantifications of potential impacts (see Appendix K).

Forest land, including predominant tree species and any endangered, threatened, or rare tree species, and quantifications of potential impacts (see Appendix K).

Tidal and non-tidal wetlands: the review of National Wetland Inventory (NWI) or topographic maps is not adequate to determine the presence or absence of wetlands on the site. At a minimum, a site visit should be conducted. A completed delineation or confirmation by the Army Corps of Engineers is strongly encouraged.

— **Streams, rivers, lakes, and ponds** on or near the site including information about flow volumes (available at the Richmond office of the USGS Water Resources Division or DEQ's Charlottesville Field Office) and water quality (available from DEQ's most recent biennial §305(b) Water Quality Assessment Report to EPA). Stream segments with water quality problems can also be identified from DEQ's §303(d) list of impaired waters. Also, indicate whether stream segments at the site are protected by designated DEQ Special Water Quality Standards or are located within identified trout waters; report any record of prior fish kills or petroleum releases in the project vicinity. The status of the waterbody under the DCR's Nonpoint Source Assessment should be documented.

— **Watersheds of significant importance for public water supplies** (such as wellhead protection zones, or watershed protection zones designated by local ordinance). Where watershed management plans have been (or are being) developed by localities, the EIR should acknowledge the existence of these planning efforts.

— **Chesapeake Bay Preservation Areas**, to include a site plan or map showing the limits of Resource Protection Areas and/or Resource Management Areas and the proximity of these features to any proposed structures or planned land disturbance on the project site (see Appendix M).

— **100-year Floodplain:** Construction of state-owned buildings in the 100-year floodplain must comply with Executive Memorandum 2-97 concerning the floodplain policies and requirements for state agencies.

— **Ground water characteristics** (the types of aquifers present; wells on or near the property that draw water from the aquifer). If ground water withdrawal is proposed, indicate whether the project site is located within a designated Ground Water Management Area and if anticipated withdrawal will exceed 300,000 gallons of water in any month. The total volume of water to be withdrawn, both monthly and annually, should be clearly documented.

— **Parks and other recreation areas** (federal, local, state, or private) near the project site including, but not limited to, recreation and open space resources identified by the Virginia Outdoors Plan; if applicable, provide information on public access to the shoreline and waterways.

— **Important natural areas** (for instance, wildlife refuges and wilderness areas, important natural areas identified by public agencies, and important private conservation areas).

— **Important scenery and scenic resources** (for instance, views of important landmarks or natural features).

— **Air quality:** This section may include a discussion of how the construction or operation of the facility will cause air pollution emissions and how fugitive dust will be controlled, and indicate whether open burning activities will occur and if the project site is located within (i) a nonattainment area for criteria pollutants such as ozone, (ii) a state designated Volatile Organic Compound and/or Nitrogen Oxides Emissions Control area, (iii) a Prevention of Significant Deterioration Area, or (iv) 10 kilometers of a federally designated Class 1 (pristine) area.

- ____ **Geology and mineral resources, caves, and sinkholes**, including identification of site-specific geologic and mineral resources from data and maps at an appropriate scale.
- ____ **Other important resources** such as designated scenic rivers, Virginia Byways and important natural communities.

Appendix E: EIR Concentrated Review Checklist

State agencies may choose to request a more thorough review of their EIRs by providing additional information. Reviewing agencies may request this information for a typical EIR but should give additional consideration to EIR's containing the following information. These items are *in addition to* those listed in the EIR Submission Checklist.

- ___ **Shapefiles and geotagged images** associated with the project.
- ___ **Wetland delineation**, confirmed by the US Army Corps of Engineers including photographs of areas of impact
- ___ **Archaeological, architectural or historic structure survey**, applicable (or a report from VCRIS and the inclusion of photographs of structures or features of interest).
- ___ **Verification of the limits of Chesapeake Bay Preservation Areas**; must map these if the project is located within a locality with designated CBPAs.
- ___ **Water Quality Impact Assessment** for any proposed land development activities in a Resource Protection Area.
- ___ Documentation showing that a site-specific **Perennial Flow Determination** has been carried out in order to determine whether water bodies on the development site have perennial flow and, if necessary, that Resource Protection Area boundaries have been adjusted accordingly on the site, based on the site evaluation findings.
- ___ Results of **surveys for the presence or habitat of endangered, rare, or threatened species** of wildlife, plants, or insects; and (search VAFWIS and FWS database). Consider if the presence of these species is possible or if the project could impact these species (downstream). Alternatively, if a survey has not been done, a description and photographs of habitat.
- ___ **Environmental hazard inspection**.
- ___ Description of **forestland and agricultural land impacts** and any specific actions that the project sponsor is committed to taking to mitigate impacts to forestlands and farmlands as required by VA Code §3.2-204 - §3.2-205.

Appendix F: Major State and Federal Permits and Approvals

- Army Corps of Engineers: Discharge or dredge or fill materials into waters of the United States, including associated wetlands (§404, Clean Water Act) and obstructions to navigable waterways (§10, Rivers and Harbors Act)
- DEQ: For projects located in Tidewater Virginia, the activities must be consistent with the requirements of the local ordinance developed pursuant to the Chesapeake Bay Preservation Act. Site plans may be submitted to the appropriate DEQ regional office for review and approval (*VA Code §62.1-44.15:67 et seq.*).
- DEQ: Erosion and sediment control plan approvals (*VA Code §62.1-44.15:51 et seq.*) and/or stormwater management plans (§62.1-44.15:24 *et seq.*); lower thresholds apply in Chesapeake Bay Preservation Areas
- DEQ (Air Pollution Control Board): New source, prevention of significant deterioration and other permits (*VA Code §10.1-1300 et seq.*)
- DEQ (State Water Control Board): Discharge, no-discharge and other permits (§402, Clean Water Act and *VA Code §62.1-44.2 through 62.1-44.34:23*)
- DEQ (State Water Control Board): Virginia Water Protection Permit (constitutes Clean Water Act §401 Water Quality Certification; *VA Code § 62.1-44.15 & §62.1-44.15:20*)
- DEQ (Waste Management Board): Hazardous material handling, treatment, storage, disposal and transportation permits (*VA Code §10.1-1400 et seq.*)
- DEQ (Waste Management Board): Solid waste disposal facility permits (*VA Code §10.1-1400 et seq.*)
- Marine Resources Commission: encroachments in, on, or over state-owned bottomlands or tidal wetlands (*VA Code §28.2-101; 28.2-1200.1*) and sand dune impacts (*VA Code §28.2-1401*)

Appendix G: Virginia Agencies Frequently Involved in Reviewing EIRs

Department of Agriculture & Consumer Services

Washington Building
1100 Bank Street
Richmond VA 23219
(804) 367-1000
(804) 786-2373

Department of Conservation and Recreation

600 East Main Street
Richmond VA 23219
(804) 786-6124
(Natural Heritage Division)

Department of Environmental Quality

629 East Main Street
Richmond VA 23219
(804) 698-4000
(Division of Land Protection and Revitalization, Air Division, Water Permitting Division, Water Supply Division, Division of Environmental Enhancement – P2)

Department of Forestry

900 Natural Resources Drive, Suite 800
Charlottesville VA 22903
(434) 977-6555

Department of Game & Inland Fisheries

7870 Villa Park Drive
Henrico VA 23228
(804) 367-1000

Department of Health

109 Governor Street, 6th Floor
Richmond VA 23219
(804) 864-7000

Department of Historic Resources

2801 Kensington Avenue
Richmond VA 23221
(804) 367-2323

Department of Transportation

1401 East Broad Street
Richmond VA 23219
(804) 786-2801

Marine Resources Commission

2600 Washington Avenue
Newport News VA 23607
(757) 247-2200

Virginia Institute of Marine Science

Route 1208, Greate Road
PO Box 1346
Gloucester Point VA 23062
(804) 684-7000

Appendix H: DEQ Regional Offices

Northern Regional Office

13901 Crown Court
Woodbridge VA 22193
(703) 583-3800

Counties: Arlington, Caroline, Culpeper, Fairfax, Fauquier, King George, Loudoun, Madison, Orange, Prince William, Rappahannock, Spotsylvania and Stafford.

Cities: Alexandria, Fairfax, Falls Church, Fredericksburg, Manassas and Manassas Park

Valley Regional Office

4411 Early Road
PO Box 3000
Harrisonburg VA 22801
(540) 574-7800

Counties: Albemarle, Augusta, Bath, Clarke, Fluvanna, Frederick, Greene, Highland, Nelson, Page, Rockbridge, Rockingham, Shenandoah and Warren

Cities: Buena Vista, Charlottesville, Harrisonburg, Lexington, Staunton, Waynesboro and Winchester

Blue Ridge Regional Office

3019 Peters Creek Road, NW
Roanoke VA 24019

Counties: Alleghany, Amherst, Appomattox, Bedford, Botetourt, Campbell, Charlotte, Craig, Floyd, Franklin, Giles, Halifax, Henry, Montgomery, , Patrick, Pittsylvania, , Pulaski and Roanoke

Cities: Bedford, Clifton Forge, Danville, Covington, Lynchburg, Martinsville, Radford, Roanoke and Salem

Piedmont Regional Office

4949-A Cox Road
Glen Allen VA 23060-6295
(804) 527-5020

Counties: Amelia, Brunswick, Buckingham, Charles City, Chesterfield, Cumberland, Dinwiddie, Essex, Gloucester, Goochland, Greenville, Hanover, Henrico, King and Queen, King William, Lancaster, Lunenburg, Mathews, Mecklenburg, Middlesex, New Kent, Nottoway Northumberland, Powhatan, Prince Edward, Prince George, Richmond, Surry, Sussex and Westmoreland

Cities: Colonial Heights, Emporia, Hopewell, Petersburg and Richmond

Tidewater Regional Office

5636 Southern Boulevard
Virginia Beach VA 23462
(757) 518-2000

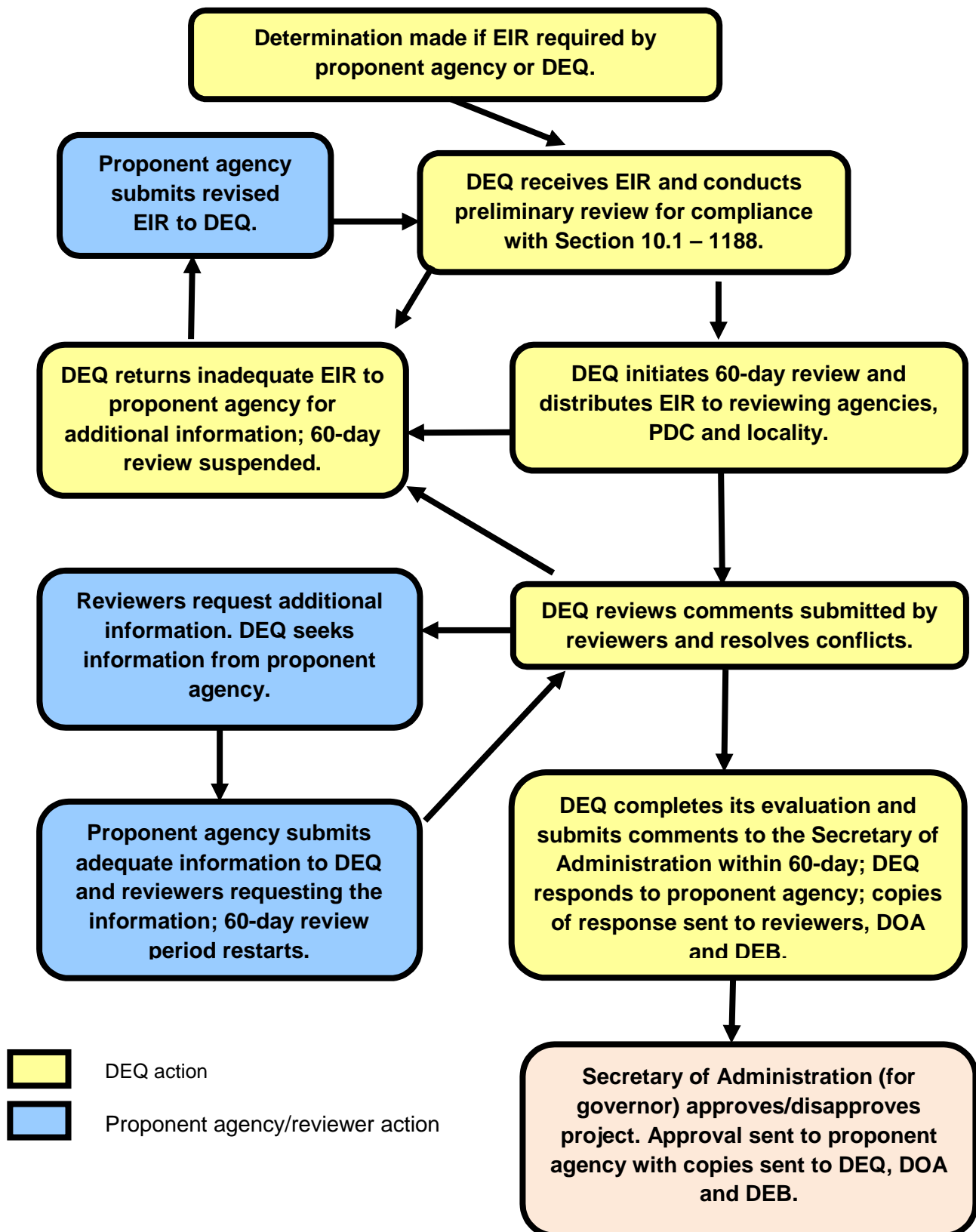
Counties: Accomack, Isle of Wight, James City, Northampton, Southampton and York
Cities: Chesapeake, Franklin, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach and Williamsburg

Southwest Regional Office

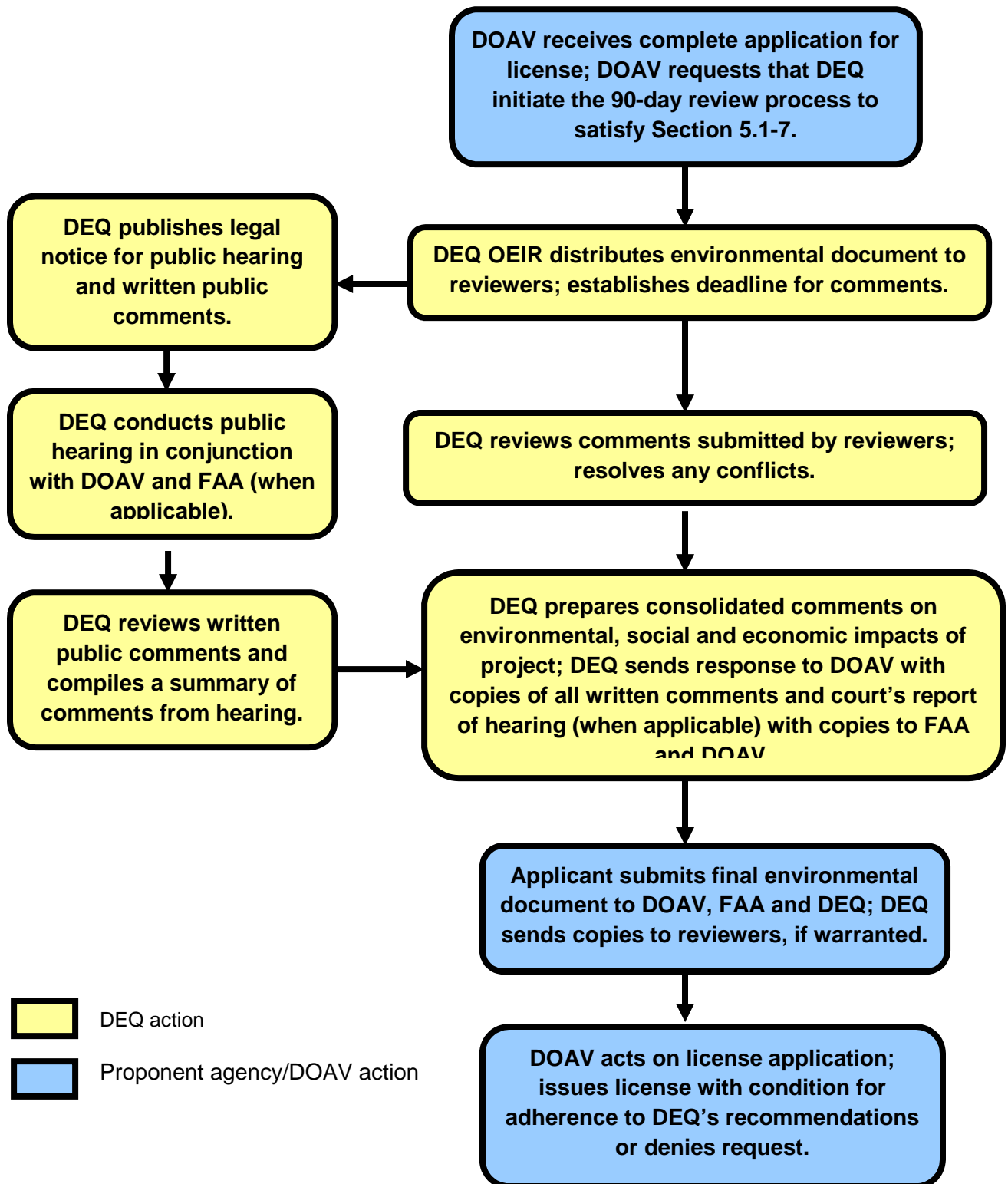
355 Deadmore Street
PO Box 1688
Abingdon, VA 24212-1688
(276) 676-4800

Counties: Bland, Buchanan, Carroll, Dickenson, Grayson, Lee, Russell, Scott, Smyth, Tazewell, Washington, Wise and Wythe
Cities: Bristol, Galax and Norton

Appendix I: EIR Review Flowchart



Appendix J: Airport Project review Flowchart



Appendix K: Considerations & Checklist for Evaluating Impacts on Farm and Forest Lands

In preparing environmental impact reports in accordance with *VA Code* §3.2-204, state agencies shall consider the impact of the major state project on all farm and forest lands that:

- Have soil classified as capability class I, II, III, or IV
- Have an exceptional combination of physical characteristics for the production of food, feed, fiber, forest products, forage, oilseed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor, and without intolerable soil erosion
- Are valuable for production of specific high-value food and fiber crops, such as fruits, vegetables, and nursery crops and have a special combination of soil quality, location, growing season, and moisture supply needed to economically produce sustained high quality or high yields of such crops when treated and managed according to acceptable farming methods
- Are of statewide or local importance for the production of food, feed, fiber, forest products, forage, or oilseed crops
- Have been recognized under a state program such as the Clean Water Farm Award or the Century Farm Program
- Are part of an agricultural or forestal district or are participating in a use value assessment and taxation program for real estate devoted to agricultural, horticultural, or forest use in accordance with the provisions of Article 4 (§58.1-3229 *et seq.*) of Chapter 32 of Title 58.1
- Make a significant contribution to the local economy or the rural character of the area where the land is located.

The governing body of each locality, with the cooperation of the US Department of Agriculture, may designate the important farmlands within its jurisdiction. In designating important farmlands the governing body shall demonstrate that adequate provision has been made for nonagricultural uses within its jurisdiction.

"Farmland" includes all land defined as follows:

- "Prime farmland" is land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, nursery and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides and labor, and without intolerable soil erosion. Prime farmland includes land that possesses the above characteristics but is being used currently to produce livestock and timber. It does not include land already in or committed to urban development or water storage.
- "Unique farmland" is land other than prime farmland that is used for production of specific high-value food and fiber crops, as determined by the US Department of Agriculture. It has the special combination of soil quality, location, growing season and moisture supply needed to economically produce sustained high quality or high yields of specific crops when treated and managed according to acceptable farming methods.

- "Important farmland" other than prime or unique farmland, is land that is of statewide or local importance for the production of food, feed, fiber, forage, nursery, oilseed, or other agricultural crops, as determined by the appropriate state agency or local government agency, and that the US Department of Agriculture determines should be considered as farmland.

EIR Checklist for Farm and Forest Lands Protection

	Yes	No	Source and Date of Information
1. Does the land contain class 1, 2, 3 or 4 soils? <i>(Contact the Natural Resources Conservation Service or USDA/Farm Service Agency)</i>			
2. Does the land have exceptional physical characteristics for the production of food, feed, fiber, forest products, forage, oilseed, vineyards and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides and labor, without intolerable soil erosion? <i>(Contact appropriate Agricultural Extension Agent)</i>			
3. Is the land valuable for the production of specific high-value food, forestry and fiber crops (vineyards, vegetable crop land, tobacco)? <i>(Contact appropriate Agricultural Extension Agent)</i>			
4. Is the land of statewide or local importance for the production of food, feed, fiber, forest products, forage or oilseed crops? <i>(Contact appropriate the Agricultural Extension Agency)</i>			
5. Has the land been recognized under a state program such as Clean Water Farm Award, Tree Farm or Stewardship Program, or the Century Farm Program? <i>(Contact VDACS about Century Farms at (804) 786-2373, DOF about Tree Farm or Stewardship Program at (804) 977-6555 and DCR about Clean Water Farm Award at (804) 786-3999)</i>			
6. Is the land part of an agricultural or forestal district or is the land part of a use value assessment and taxation program for real estate devoted to agricultural, horticultural or forest use in accordance with the provisions of Article 4 (§58.1-3229 et seq.) of Chapter 32 of Title 58.1? <i>(Contact appropriate zoning or planning departments and local commissioners of revenue)</i>			
7. Does the land make a significant contribution to the local economy or the rural character of the area in which the land is located? <i>(Contact appropriate Agricultural Extension Agent)</i>			

Appendix L: Architectural & Archeological Resources Guidance

In order for the Department of Historic Resources (DHR) to effectively review and comment on how proposed undertakings may impact significant historic, architectural, landscape, and archaeological resources listed in or eligible for the Virginia Landmark Register, and to fulfill its responsibility under the EIR law, DHR requires the following information:

- The construction limits of the project area clearly marked on a USGS topographical map.
- An Area of Potential Effects (APE), for direct and indirect impacts clearly delineated on a USGS topographical map and/or aerial map. An APE for direct impacts typically encompasses the construction limits of the project or the parcel on which construction will take place (typically the "project area"). A second APE for indirect impacts is the maximum geographic area where the project could have an impact on the setting of surrounding properties. The APE for indirect impacts factors in the viewshed of the project to all surrounding properties, as well as any secondary impacts such as noise, vibration, and reasonably foreseeable consequences. Please carefully consider the boundaries of the APEs and include a written narrative justifying your boundaries, a ½- mile radius is typically not appropriate for most projects.
- A completed Data Sharing System (DSS) archives search within your APE for indirect impacts. The results of the search will include a USGS topographical map showing the boundaries of both your APEs and the location of known architectural and archaeological resources. An archives search may be completed in person at DHR's Richmond Office, through DHR's fee-based on-line system or by DHR Archives staff for a fee. For more information on how to request an archive search please reference the DHR website at http://www.dhr.virginia.gov/archives/archiv_searches.htm.
- Color photographs no smaller than 4X6 of the project area and its surrounding APE for indirect impacts. Please be sure to include photographs of any buildings or structures over fifty years old located in the APE for indirect impacts and accurately identify the location and direction in which the photograph was taken.
- Construction plans including, at a minimum, a site plan, architectural elevations, and any available renderings.
- Description of how the project will directly and indirectly impact historic, architectural and/or archaeological resources listed in or eligible for the Virginia Landmarks Register that are located in the APEs.
- Virginia Cultural Resources Information System (V-CRIS) map

It is suggested that the applicant or its agent initiate consultation as early as possible with DHR while preparing the EIR to allow time for the completion of any recommended studies prior to finalizing the document for submission to DEQ. Early consultation may avoid unnecessary project delays. Please note that any archaeological studies conducted on state-controlled land must be permitted by DHR. The permit application can be found at http://www.dhr.virginia.gov/pdf_files/StateLandsApp.PDF.

For additional guidance on what to submit or additional questions about DHR's role in the EIR review process, please refer to the agency's website at <http://www.dhr.virginia.gov/review/orcCoVPrjRev.html> or contact Mr. Roger Kirchen, Archeologist, Office of Review and Compliance at (804) 482-6091 or via email at roger.kirchen@dhr.virginia.gov.

Appendix M: State Agency Guidance on Consistency with the Chesapeake Bay Preservation Act

VA Code §62.1-44.15:67 *et seq.* of the Chesapeake Bay Preservation Act (Bay Act) requires all state agencies to exercise their authorities consistent with comprehensive plans, zoning ordinances and subdivision ordinances adopted by local governments to comply with the Chesapeake Bay Preservation Area Designation and Management Regulations (the Regulations). In May 2000, the Bay Act was incorporated as one of the enforceable programs of the Virginia CZM Program. The Governor's Executive Order #21 requires agencies of the Commonwealth to conduct activities in a manner consistent with and supportive of the Virginia CZM Program. DEQ's Office of Local Government Programs (OLGP) is the review authority for determining the consistency of state projects with the requirements of the Bay Act and the Regulations.

Proponent agencies are encouraged to contact the appropriate locality and the OLGP during preparation of an EIR to ensure that state development projects are consistent with the requirements of the local zoning and subdivision ordinances and comprehensive plans.

Environmental review request documents should include all information necessary to enable OLGP staff to determine the extent to which a proposed project will impact Chesapeake Bay Preservation Areas (CBPAs), which include Resource Protection Areas (RPAs) and Resource Management Areas (RMAs), as designated by the locality in which the proposed project site is located, and whether the proposed project is consistent with the requirements of the Bay Act and the Regulations. If the environmental review request documents do not include sufficient information the applicant or proponent agency may be required by OLGP staff to provide any or all of the following:

- a map or scale drawing showing the limits of RPAs and/or RMAs and the proximity of these features to any existing or proposed land disturbance, development or redevelopment on the site
- a water quality impact assessment (WQIA), or equivalent information for any proposed land disturbance, development or redevelopment activities in an RPA or RMA, as specified in the local Bay Act ordinance
- documentation showing that a site-specific perennial flow and/or nontidal wetland determination has been conducted to determine whether water bodies on or near the proposed development site have perennial flow or nontidal wetlands connected by surface flow, and if necessary, that RPA boundaries have been adjusted on the site, based on current conditions.

The applicant or proponent agency must show that the proposed development meets all the performance criteria under 9 VAC 25-830-130 of the Regulations, including the performance standards for RMAs and RPAs that require: a) no more land shall be disturbed than is necessary for the proposed use or development; b) indigenous vegetation shall be preserved to the maximum extent practicable consistent with the use or development proposed; and, c) land development shall minimize impervious cover consistent with the proposed use or development.

A stormwater management plan consistent with the stormwater management criteria and the water quality protection provisions of the *Virginia Stormwater Management Regulations* 9 VAC 25-870-10 et. seq. must be submitted for approval by DEQ's Stormwater Management Program prior to any construction or land disturbing activities. An Erosion and Sediment Control Plan should be developed according to the *Virginia Erosion and Sediment Control Handbook*, Third Edition, 1992, and submitted to the DEQ prior to any land disturbance activities.

Pursuant to 9VAC25-830-110 et seq. of the Regulations, on-site delineation of the RPA is required for all projects in CBPAs. Because US Geological Survey maps are not always indicative of actual "in-field" conditions, they cannot be used to determine the site-specific boundaries of the RPA. Projects that include any proposed land disturbance, development or redevelopment within the RPA must also satisfy the requirements of 9VAC25-830-140 of the Regulations.

OLGP staff provides general comments and guidance at the conceptual stage of review when an environmental review request is initiated and less specific information is available. It is also often necessary for OLGP staff to request review of final site plans. General comments at the conceptual stage of review typically advise that the applicable requirements in the Regulations must be met, including erosion and sediment control and stormwater management requirements. To ensure that the project complies with the Regulations, applicants or proponent agencies must submit final site plans prior to any land disturbance, development or redevelopment, if requested. OLGP staff provides final site plan review regarding consistency with the Regulations through direct correspondence with the applicant or proponent agency. Other divisions within DEQ provide similar final site plan review for erosion and sediment control and stormwater management plans.

For further guidance, questions, or concerns, contact:

Department of Environmental Quality - OLGP

629 East Main Street

Richmond VA 23219

(804) 698-4000

www.deq.virginia.gov/Programs/Water/ChesapeakeBay/ChesapeakeBayPreservationAct.aspx

Appendix N: Virginia Coastal Zone Management Program Enforceable Policies

Fisheries Management: The program stresses the conservation and enhancement of finfish and shellfish resources and the promotion of commercial and recreational fisheries to maximize food production and recreational opportunities. This program is administered by the Marine Resources Commission (VMRC) (*VA Code* §28.2-200 to §28.2-713) and the Department of Game and Inland Fisheries (DGIF) (*VA Code* §29.1-100 to §29.1-570).

The State Tributyltin (TBT) Regulatory Program was added to the Fisheries Management program. The use of TBT in boat paint constitutes a serious threat to important marine animal species, and the TBT program monitors boating activities and boat painting activities to ensure compliance with TBT regulations promulgated pursuant to the amendment. VMRC, DGIF and VDACS share enforcement responsibilities (*VA Code* §3.2-3904 and 3.2-3935 to §3.2-3937).

Subaqueous Lands Management: The management program for subaqueous lands establishes conditions for granting or denying permits to use state-owned bottomlands based on considerations of potential effects on marine and fisheries resources, tidal wetlands, adjacent or nearby properties, anticipated public and private benefits, and water quality standards established by DEQ. The program is administered by VMRC (*VA Code* §28.2-1200 to §28.2-1213).

Wetlands Management: The purpose of the wetlands management program is to preserve wetlands, prevent their despoliation and accommodate economic development in a manner consistent with wetlands preservation. The tidal wetlands program is administered by VMRC (*VA Code* §28.2-1301 through §28.2-1320). The Virginia Water Protection Permit program administered by DEQ includes protection of wetlands (both tidal and non-tidal) (*VA Code* §62.1-44.15:20 *et seq.*) and Water Quality Certification pursuant to §401 of the Clean Water Act.

Dunes Management: Dune protection is carried out pursuant to the Coastal Primary Sand Dune Protection Act and is intended to prevent destruction or alteration of primary dunes. This program is administered by VMRC (*VA Code* §28.2-1400 through §28.2-1420).

Non-point Source Pollution Control: Virginia's Erosion and Sediment Control Law requires soil-disturbing projects to be designed to reduce soil erosion and to decrease inputs of chemical nutrients and sediments to the Chesapeake Bay, its tributaries and other rivers and waters of the Commonwealth. This program is administered by DEQ (*VA Code* §62.1-44.15:51 *et seq.*). Coastal Lands Management is a state-local cooperative program administered by DEQ's Water Division and 84 localities in Tidewater Virginia (see above) (*VA Code* §62.1-44.15:67 – 62.1-44.15:79 and Virginia Administrative Code 9 VAC 25-830-10 *et seq.*).

Point Source Pollution Control: The point source program is administered by DEQ (State Water Control Board) pursuant to *VA Code* §62.1-44.15. Point source pollution control is accomplished through the implementation of: (1) the NPDES permit program established pursuant to §402 of the federal Clean Water Act and administered in Virginia as the VPDES permit program; and (2) the Virginia Water Protection Permit (VWPP) program administered by DEQ (*VA Code* §62.1-44.15:5) and Water Quality Certification pursuant to §401 of the Clean Water Act.

Shoreline Sanitation: The purpose of this program is to regulate the installation of septic tanks, set standards concerning soil types suitable for septic tanks and specify minimum distances that tanks must be placed away from streams, rivers and other waters of the Commonwealth. This program is administered by the VDH (VA Code §32.1-164 through §32.1-165).

Air Pollution Control: The program implements the federal Clean Air Act to provide a legally enforceable State Implementation Plan for the attainment and maintenance of the National Ambient Air Quality Standards. This program is administered by DEQ (State Air Pollution Control Board) (VA Code §10-1.1300 through §10.1-1320).

Coastal Lands Management: A state-local cooperative program administered by DEQ's Water Division and 84 localities in Tidewater Virginia established pursuant to the Chesapeake Bay Preservation Act (VA Code §62.1-44.15:67 – 62.1-44.15:79) and Chesapeake Bay Preservation Area Designation and Management Regulations (Virginia Administrative Code 9 VAC 25-830-10 *et seq.*).

Appendix O: Virginia Coastal Zone Management Program Advisory Policies

Advisory Policies for Geographic Areas of Particular Concern

Although not required for the purposes of consistency, in accordance with 15 CFR §930.39(c), the federal agency should consider the advisory policies (recommendations) of the Virginia CZM Program as well.

Coastal Natural Resource Areas: These areas are vital to estuarine and marine ecosystems and/or are of great importance to areas immediately inland of the shoreline. Such areas receive special attention from the Commonwealth because of their conservation, recreational, ecological, and aesthetic values. These areas are worthy of special consideration in any planning or resources management process and include the following resources:

- Wetlands
- Aquatic spawning, nursery and feeding grounds
- Coastal primary sand dunes
- Barrier islands
- Significant wildlife habitat areas
- Public recreation areas
- Sand and gravel resources
- Underwater historic sites

Coastal Natural Hazard Areas: This policy covers areas vulnerable to continuing and severe erosion and areas susceptible to potential damage from wind, tidal, and storm-related events including flooding. New buildings and other structures should be designed and sited to minimize the potential for property damage due to storms or shoreline erosion. The areas of concern are as follows:

- Highly erodible areas
- Coastal high hazard areas, including flood plains

Waterfront Development Areas: These areas are vital to the Commonwealth because of the limited number of areas suitable for waterfront activities. The areas of concern are as follows:

- Commercial ports
- Commercial fishing piers
- Community waterfronts

Although the management of such areas is the responsibility of local government and some regional authorities, designation of these areas as Waterfront Development Areas of Particular Concern under the Virginia CZM Program is encouraged. Designation will allow the use of federal Coastal Zone Management Act funds to be used to assist in planning for such areas and in the implementation of such plans. The Virginia CZM Program recognizes two broad classes of priority uses for waterfront development Areas of Particular Concern:

- Water access-dependent activities;
- Activities significantly enhanced by the waterfront location and complementary to other existing and/or planned activities in a given waterfront area

Advisory Policies for Shorefront Access Planning and Protection

- Virginia Public Beaches: Approximately 25 miles of public beaches are located in the cities, counties and towns of Virginia exclusive of public beaches on state and federal land. These public shoreline areas will be maintained to allow public access to recreational resources.
- Virginia Outdoors Plan: Planning for coastal access is provided by DCR in cooperation with other state and local government agencies. The VOP, which is published by DCR, identifies recreational facilities in the Commonwealth that provide recreational access. The VOP also serves to identify future needs of the Commonwealth in relation to the provision of recreational opportunities and shoreline access. Prior to initiating any project, consideration should be given to the proximity of the project site to recreational resources identified in the VOP.
- Parks, Natural Areas, and Wildlife Management Areas: Parks, wildlife management areas and natural areas are provided for the recreational pleasure of the citizens of the Commonwealth and the nation by local, state and federal agencies. The recreational values of these areas should be protected and maintained.
- Waterfront Recreational Land Acquisition: It is the policy of the Commonwealth to protect areas, properties, lands or any estate or interest therein, of scenic beauty, recreational utility, historical interest or unusual features which may be acquired, preserved, and maintained for the citizens of the Commonwealth.
- Waterfront Recreational Facilities: This policy applies to the provision of boat ramps, public landings and bridges which provide water access to the citizens of the Commonwealth. These facilities shall be designed, constructed and maintained to provide points of water access when and where practicable.
- Waterfront Historic Properties: The Commonwealth has a long history of settlement and development, and much of that history has involved both shorelines and near-shore areas. The protection and preservation of historic shorefront properties is primarily the responsibility of DHR. Buildings, structures and sites of historical, architectural and/or archaeological interest are significant resources for the citizens of the Commonwealth. It is the policy of the Commonwealth and the Virginia CZM Program to enhance the protection of buildings, structures and sites of historical, architectural, and archaeological significance from damage or destruction when practicable.

Appendix P: Online Resources

Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Database: Information on hazardous waste sites and potentially hazardous waste sites and remedial activities across the nation, including sites that are on or being considered for the National Priorities List

www.epa.gov/superfund/sites/cursites/index.htm

DCR Natural Heritage Search: Produces lists of resources that occur in specific counties, watersheds or physiographic regions

www.dcr.virginia.gov/natural_heritage/dbsearchtool.shtml

DGIF Fish and Wildlife Information Service: <http://vafwis.org/fwis/>

DHR Data Sharing System: Survey records in the DHR inventory

www.dhr.virginia.gov/archives/data_sharing_sys.htm

EPA Envirofacts Database: Environmental Information, including regulated facilities and Toxics Release Inventory Reports

www.epa.gov/enviro/index.html

EPA NEPAAssist Database: Facilitates the environmental review process and project planning

<http://nepassisttool.epa.gov/nepassist/entry.aspx>

EPA RCRAInfo Search: Information on hazardous waste facilities

www.epa.gov/enviro/facts/rcrainfo/search.html

Virginia Coastal Geospatial and Educational Mapping System (GEMS): Virginia's coastal resource data and maps, coastal laws and policies, facts on coastal resource values and direct links to collaborating agencies responsible for current data

<http://www.deq.virginia.gov/Programs/CoastalZoneManagement/CoastalGEMSGeospatialData.aspx>

MARCO Mid-Atlantic Ocean Data Portal: The Mid-Atlantic Ocean Data Portal is a publicly available online toolkit and resource center that consolidates available data and enables users to visualize and analyze ocean resources and human use information such as fishing grounds, recreational areas, shipping lanes, habitat areas, and energy sites, among others.

[http://portal.midatlanticocean.org/visualize/#x=-](http://portal.midatlanticocean.org/visualize/#x=-73.24&y=38.93&z=7&logo=true&controls=true&basemap=Ocean&tab=data&legends=false&layers=true)

[73.24&y=38.93&z=7&logo=true&controls=true&basemap=Ocean&tab=data&legends=false&layers=true](http://portal.midatlanticocean.org/visualize/#x=-73.24&y=38.93&z=7&logo=true&controls=true&basemap=Ocean&tab=data&legends=false&layers=true)

Virginia Environmental Geographic Information Systems (VEGIS): Information on DEQ permitted solid waste management facilities, impaired waters, petroleum releases, registered petroleum facilities, permitted dischargers, hazardous waste sites, water monitoring stations, National Wetlands Inventory

www.deq.virginia.gov/ConnectWithDEQ/VEGIS.aspx

Virginia Outdoors Foundation: Identify VOF-protected land

<http://vof.maps.arcgis.com/home/index.html>

Appendix Q: Pollution Prevention Guidance

General Guidance

- Heavy construction equipment must be properly tuned, maintained, and fueled with a low sulfur content diesel fuel to reduce emissions
- Construction areas should be watered frequently to reduce dust and construction activities should be suspended during high winds
- Non-toxic paints, stains, and preservatives and chemical-free carpeting should be used
- Stations to recycle materials such as paper, cardboard, aluminum, and plastics should be incorporated. In addition to collecting recyclable materials, recycled goods should be procured to help stimulate marketing of these products
- Use innovative stormwater management techniques such as rain gardens, infiltration swales and stormwater wetlands
- The use of herbicides or pesticides for landscape maintenance should be in accordance with the principles of integrated pest management. The least toxic pesticides that are effective in controlling the target species should be used. In ozone non-attainment or maintenance areas, the use of pesticides or herbicides that contain volatile organic compounds, should be curtailed, substituted with an alternative product free of volatile organic compounds, or scheduled outside of the ozone season.

Water Conservation

- Grounds should be landscaped with hardy native plant species to conserve water as well as lessen the need to use fertilizers and pesticides.
- Low-flow toilets should be installed in new facilities.

Energy Conservation

- Energy-efficient heating and cooling, proper building insulation, and the use of energy-efficient lighting should be incorporated in the design of new facilities. The liberal use of native species of trees in landscaping can also help to reduce cooling costs.
- Leadership in Energy and Environmental Design (LEED): The U.S. Green Building Council (USGBC) is a non-profit organization that certifies sustainable buildings. USGBC has developed the LEED Green Building Rating System for evaluating sustainable concepts incorporated in the building and site development. LEED addresses all building types and emphasizes state-of-the-art strategies in five areas: sustainable site development, water savings, energy efficiency, materials and resources selection, and indoor environmental quality. The Department of General Services, Division of Engineering and Buildings (DEB), encourages state agencies and their architectural and engineering designers to recognize and incorporate the energy, environmental, and sustainability concepts listed in the LEED Green Building Rating

System into the development and procurement of their projects. For more information on the LEED rating system visit: www.usgbc.org/LEED/.

- High Performance Buildings Act (§ 2.2-1182 et. seq.): Any executive branch agency or institution entering the design phase for the construction of a new building greater than 5,000 gross square feet in size or the renovation of a building where the cost of the renovation exceeds 50 percent of the value of the building, shall obtain a minimum of LEED Silver, obtain a minimum of 2 Globes (Green Globes certification) or comply Virginia Energy Conservation and Environmental Standards (VEES) and the building shall be designed, constructed, verified, and operated to comply with the high performance building certification program.
- Review the Department of General Services [Construction and Professional Services Manual \(CPSM\)](#) to ensure compliance with energy conservation and environmental performance standards.
- Incorporation of Governor's [Executive Order Thirty One \(2014\)](#) directs all state executive branch agencies, authorities, departments, and all institutions of higher education to pursue energy efficiency measures, especially Energy Performance Contracting. The Executive Order sets the goal to reduce electricity consumption in state facilities by 15% from the 2009-2010 baseline and directs state agencies to utilize the [Energy Performance Contracting](#) process supported by DMME.

DEQ's comments and recommendations about a project's impact are based on the mitigation commitments stated in the EIR. DEQ may recommend against proposed measures that are not necessary or effective or may propose additional or substitute measures. The Secretary of Administration may condition project approval on the commitments of the proponent agency and additional recommendations by DEQ.

The desirability of a mitigation measure is determined by its effectiveness in reducing or voiding an adverse environmental impact or otherwise enhancing environmental values. From most desirable to least, mitigation includes:

- Avoiding an impact. This is most useful where the project will give rise to irretrievable loss of a resource in short supply (e.g., non-tidal wetlands) and where the alternatives analysis identifies feasible site-plan alternatives. It is the best form of mitigation.
- Reducing impacts in scale or type. If an adverse impact cannot be avoided, it should be minimized (for instance, paved areas may be reduced in size, or a conventional pavement replaced by porous pavement in order to minimize stormwater runoff).
- Compensating for lost resources or land area. Where there is no way to avoid or reduce the loss of an important resource, and compensation is achievable, then it should be included in the project proposal. Compensation includes replacement in a new location; preservation of other, similar resources (offsets); or preservation of other resources of similar value. If compensation

is the chosen alternative, then safety factors should be considered (for example, creation of additional wetlands to offset the loss) in order to ensure effective function and value of the lost resource.

Mitigation supplements, but does not substitute for, innovative resource conservation measures on the part of state agencies. As a general rule, agencies are encouraged to include resource conservation as integral parts of their project plans. For instance, recycling of materials as a part of project operation is expected of all state agencies and does not qualify as mitigation.